

REMARKS

Allocation of Customer Number

Applicants' counsel submitted form PTO-SB-122 with the Request for Continued Examination of March 1, 2006. While the address for counsel of record appears on the cover sheet for the present *Office Action*, this application has not yet been associated with counsel's Customer Number. The Applicants request the Examiner's assistance with allocating **Customer Number 22830** to the present application so the Applicants may access the same via Private PAIR.

Information Disclosure Statement

The *Information Disclosure Statement* of March 1, 2006 was considered by the Examiner on April 6, 2006. The Applicants thank the Examiner for having considered the *Statement* following issuance of the present *Office Action*. Applicants have, with the present amendment, submitted a *Supplemental Information Disclosure Statement* compliant with 37 C.F.R. § 1.97. The Applicants respectfully request the Examiner's consideration of the same.

Amendments to the Specification

The Examiner has objected to the specification "because it contains an embedded hyperlink and/or other form of browser-executable code." *Office Action*, 2. The Examiner specifically notes the hyperlinks on pages 18, 18, 82, and 118. See *Office Action*, 2. The Applicants have amended the specification to remove the aforementioned hyperlinks and believe the Examiner's objection to have been overcome.

An additional amendment has been made to page 99 to correct a typographical error. No new matter is introduced through this amendment.

Abstract

The Examiner has objected to the abstract in that it “does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4).” *Office Action*, 2. Applicants have provided a replacement abstract on a separate page as set forth above. The Applicants therefore believe the Examiner’s objection to have been overcome.

Priority Claim

The Examiner stated that the amendments to the cross-reference section of the present application and filed with the Request for Continued Examination “will not be granted because [the cross-referenced] applications do not support the most recent claims amendments.” *Office Action*, 14. The Applicants note that the amendments to the cross-reference section were made to properly reflect the continuation-in-part priority claims of the present application as provided by 37 C.F.R. § 1.78(a)(1) and otherwise required by 37 C.F.R. § 1.78(a)(2)(i) and 37 C.F.R. § 1.78(a)(2)(iii). The amendments to the cross-reference section were not made for the purpose of antedating a cited reference or to otherwise evidence 35 U.S.C. § 112, ¶ 1 support for any particular claim limitation although the Applicants reserve the right to make such an assertion should it later prove necessary.

For the sake of clarity, the Applicants note that the present application is the U.S. national phase of Patent Cooperation Treaty application number PCT/US00/17078 filed June 21, 2000, which claims the priority benefit of U.S. provisional patent application 60/140,417 filed June 22, 1999. The present application is also a continuation-in-part and claims the priority benefit of U.S. patent application 09/720,277 filed March 12, 2001, which is the U.S. national phase of Patent Cooperation Treaty application number PCT/US99/14585 filed June 28, 1999, which claims the priority benefit of U.S. provisional patent application number 60/091,130 filed June 29, 1998. U.S. patent application 09/720,277 is a continuation-in-part and claims the priority benefit of U.S. patent

application 09/034,507 filed March 4, 1998 and now U.S. patent number 6,408,336, which claims the priority benefit of U.S. provisional patent application number 60/039,542 filed March 10, 1997 as well as U.S. provisional patent application number 60/040,262 filed March 10, 1997.

The Applicants respectfully request the Examiner confirm the entry of the amendments to the Cross-Reference Section while recognizing the Examiner's assertion that this claim does not support the presently claimed 'interface apparatus.' The Applicants refrain from further comments as to the Examiner's assertions in this regard as the Examiner's premise is not presently ripe for discussion.

Rejections Under 35 U.S.C. § 112, ¶ 1

The Examiner contends claims 1-14 are rejected under 35 U.S.C. § 112, ¶ 1 "as failing to comply with the written description requirement." *Office Action*, 3. The Examiner contends "[t]he claim(s) contains (sic) subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention." *Office Action*, 3. The Applicants respectfully traverse and reference at least the following exemplary portions of the specification evidencing written description as required by 35 U.S.C. § 112, ¶ 1.

Interface Apparatus

The Examiner first references claim 1's recitation of an 'interface apparatus' in the preamble. The Examiner contends the specification does not make "a single reference to 'an interface apparatus.'" *Office Action*, 3.

The specification references user interface apparatus such as browsers as may be implemented in external and internal networks. Specifically, the specification states:

Once internal networks begin using Internet addressing and Internet protocols and are connected into virtual private networks, the **browsers that have been developed for the Internet can be used as well in the internal networks 103**, and from the point of view of the user, there is no difference between accessing data in Internet and accessing it in internal network 103. Internal network 103 has thus become an intranet, that is, an **internal network that has the same user interface** as Internet 111.

Specification, 7:12-17 (emphasis added).

The *Summary of the Invention*, too, discloses the use of interfaces wherein the specification states "[t]he invention attains . . . **an interface** to the policy-enabled component [of a generalized policy server] which presents the access control system as a virtual relational database table." *Specification*, 10:3-5 (emphasis added). Figure 41 of the present application is, in fact, "a schema for a query **interface** to the generalized policy server." *Specification*, 12:26 (emphasis added).

The Applicants note that "[t]he claimed invention subject matter **need not be described literally, i.e., using the same terms, in order for the disclosure to satisfy the written description requirement.**" MPEP § 2106(V)(B)(1) (emphasis added). The MPEP further notes that "there is no *in haec verba* requirement" with respect to claim limitations vis-à-vis the specification; the limitation need only be "supported in the specification through express, implicit, or inherent disclosure." MPEP § 2163(I)(B). Compliance with the written description requirement "calls for the examiner to compare the scope of the claim with the scope of the description to determine whether [the] applicant has demonstrated possession of the claimed invention." MPEP § 2163(II)(A)(2). That review

is conducted from the standpoints of one of skill in the art at the time the application was filed. *Wang Labs. v. Toshiba Corp.*, 993 F.2d 858, 865 (Fed. Cir. 1993).

The preamble of claim 1 recites ‘an interface apparatus for providing information in response to a query of a virtual database table.’ The Applicants believe that at least the aforementioned references to a user interface, an interface for a generalized policy server, and query interface for the policy server sufficiently evidence the possession of the invention at the time the application was filed. As such, the Applicants believe the Examiner’s rejection with regard to this particular claim element to have been overcome.

Information Source

The Examiner next contends that “[t]he specification does not contain a clear and concise description of the manner and process of making an ‘information source’ such that a skilled technician can make and use the invention.” *Office Action*, 3. The Applicants respectfully traverse.

As an initial matter, the Applicants note that the Examiner’s 35 U.S.C. § 112, ¶ 1 rejection appears to be directed toward enablement rather than written description. See MPEP § 2164 (noting “[t]he enablement requirement refers to the requirement of 35 U.S.C. 112, first paragraph that the specification describe *how to make and how to use the invention*”) (emphasis added); see also *Vas-Cath, Inc. v. Mahurkar*, 933 F.3d 1555, 1563 (Fed. Cir. 1991) (noting the written description and enablement are two separate and distinct requirements of Section 112, paragraph 1).

The Applicants do not believe an enablement rejection to be appropriate in the present case as what is claimed is *not* the making of an ‘information source’ as is suggested by the Examiner. See *Office Action*, 3. What *is* claimed is an interface apparatus (*e.g.*, a user interface such as a browser) for providing a response to a query to a virtual database table, an *information source* providing information for response to the query. As such, the Applicants address the Examiner’s rejection in the context of a written description rejection.

As clearly referenced in the *Summary of the Invention*, the presently described generalized policy server provides the aforementioned interface (an interface apparatus) “which presents the access control system as a virtual relational database table in which there is a row for every user-*information source* combination.” *Specification*, 10:4-6 (emphasis added). “[T]he policy-enabled component addresses a query indicating the user and the *information source* to the table.” *Specification*, 10:6-8 (emphasis added).

The specification as it relates to FIGURE 29 discloses a “policy query 2939 com[ing] from policy server 2617 . . . and includ[ing] a specifier of the action to be performed as well as a specification of the *information source or other resource* upon which the action is to be performed.” *Specification*, 88:17-19 (emphasis added). A further detail discussion of the information sources claimed in the present application appears in the context of a virtual database service responding to a query as is apropos with regard to claim 1. Specifically, the specification states:

VDB service 3813 is able to respond to query 5403 even though table 5411 does not exist because it is able to use the information in the query’s WHERE clause to locate and retrieve the results specified in the SELECT clause in one or more *information sources 5409*. Having retrieved the results, VDB service 3813 builds a constructed row 5417 corresponding to virtual row 5413 (i) selected by the query. Constructed row 5417 includes at least actual fields 5419 for the results that are to be returned for the query. Constructed rows 5417 are built for each query, and only as many are built for each query as are needed for the rows of the virtual table specified by the query. *Information sources 5409 may include information sources local to VDB service 3813 or non-local information sources, and may even include other databases.*

Specification, 99:13-21 (emphasis added).

The Applicants believe that at least the aforementioned explicit references to an information source sufficiently evidence the possession of the invention at the time the application was filed. As such, the Applicants believe the Examiner’s rejection with regard to this particular claim element to have been overcome.

Virtual Database Service

The Examiner next contends that “[t]he specification does not contain a clear and concise description of the manner and process of making the claimed ‘virtual database service.’” *Office Action*, 4. The Applicants respectfully traverse.

As clearly stated in the *Summary of the Invention*, “[a] *virtual database service* in the improved generalized policy server assembles the information needed for the query result using data sources that are accessible to it. In a preferred embodiment, the query is written in the well-known SQL language and the *virtual database service* emulates standard remotely-accessible database systems.” *Specification*, 10:11-15 (emphasis added). This summary corresponds to the detailed description that notes

VDB service 3813 emulates a relational database protocol, the information which is being queried appears to be organized into a table which has a row for each potential user/potential resource combination for the resources controlled by policy-enabled component 2609 and columns that define fields in the rows. Each field in a row contains the row’s value for the column to which the field belongs.

Specification, 97:30-98:1 (emphasis added). The detailed description continues:

VDB service 3813 is termed a *virtual database service* because the queries are made on a virtual relational table instead of a real one. The reason for this is that the queries dealt with by *VDB service 3813* are made to find out whether the access policies in policy database 3825 will permit a user who is requesting access to an information resource to have access to the information resource. A real relational database table for such queries would have to have a row in the table for each <potential user, information resource> pair, since any of the potential users may request access. In most applications the real relational database table would not only be unacceptably large, it would be undefinable, since there would be no way of knowing who all the potential users were.

Specification, 98:23-31 (emphasis added).

The Examiner contends *VDB service 3813* does not appear in FIGURE 54 thus “it is not possible to determine exactly what comprises a virtual database.” *Office Action*, 4. The Applicants believe the reference to FIGURE 54 is not necessary in that it refers to a

virtual relational database table and not the presently claimed *virtual database service*, which is not only described above but also appears in FIGURE 38 of the present application. Further, the virtual database server 5407 provides the aforementioned virtual database service.

As both written description and figurative illustration are provided, the Applicants believe they have evidenced the possession of the invention at the time the application was filed. As such, the Applicants believe the Examiner's rejection with regard to this particular claim element to have been overcome.

Virtual Database Table

The Examiner final 35 U.S.C. § 112, ¶ 1 rejection pertains to the claimed virtual database table and proper written description pertaining to the same. See *Office Action*, 4. The Examiner's reference to the virtual relational database table 5411 provides the proper written description for this particular claim element. See *Office Action*, 4 (referring to *Specification*, 99:1-9). The Examiner notes that the real relational database table 5411 "is not included in FIG. 54" thereby precluding a skilled artisan from "know[ing] how to make a virtual database table exactly like a non-existing real database table." *Office Action*, 5.

The Applicant notes that the association of reference numeral 5411 with the real relational database table was in error. The specification has been amended, above, to correct this error. Further, and as noted earlier in the specification, "[a] real relational database table for such queries would have to have a row in the table for each <potential user, information resource> pair, since any of the potential users may request access." *Specification*, 98:27-29. "In most applications the real relational database table would not only be unacceptably large, it would be undefinable, since there would be no way of knowing who all the potential users were." *Specification*, 98:29-31.

As both written description and figurative illustration are provided, the Applicants believe they have evidenced the possession of the invention at the time the

application was filed. As such, the Applicants believe the Examiner's rejection with regard to this particular claim element to have been overcome.

Rejections Under 35 U.S.C. § 102(b)

The Examiner has rejected independent claim 1 as being anticipated by U.S. patent number 5,634,053 to *Noble et al.* See *Office Action*, 5. The Applicants respectfully traverse in light of the present amendment.

Presently amended claim 1 recites (with the present amendment in bold):

An interface apparatus for providing information in response to a query of a virtual database table, the interface apparatus, comprising:

a virtual database service, the virtual database service comprising the virtual database table, wherein the virtual database table comprises one or more rows, each of the one or more rows comprising one or more fields; and

an information source for the information to be provided in response to the query, the query comprising a field name and an indication of manner for selecting a row, wherein the virtual database service is configured to receive the query, respond to the field name and the indication of the manner for selecting a row as required to obtain the information to be provided from the information source, and providing the information as a value of the field indicated by the field name in the selected row, in response to the query **and wherein the information source comprises an access evaluator, the access evaluator configured to determine whether a user may have access to an information resource within the information source.**

Noble et al. does not disclose 'an access evaluator configured to determine whether a user may have access to an information resource within the information source,' that 'evaluator' being comprised in the 'information source.' The Applicants note that this particular claim element was originally found in previously pending claim 4 and has been introduced to the present claim through the present amendment.

With respect to this element in the *Office Action* as it pertained to previously presented claim 4, the Examiner stated that “Noble discloses the information source is an access evaluator which determines whether a user may have access to an information resource.” *Office Action*, 6. The Examiner references column 12, lines 48-55 of the *Noble et al.* reference in supporting this rejection. This particular portion of *Noble et al.*, however, discusses access to “meta-data stored in a UNIX file system from a remote site.” *Noble et al.*, col. 12, l. 49. An SDD (Smart Definition Dictionary) server allows for “parsing, translating, optimizing, and coordinating the global and local queries” of the UNIX file system. *Noble et al.*, col. 12, l. 51-52.

The Applicants respectfully disagree with the Examiner’s assertion that *Noble et al.* somehow discloses an access evaluator that determines whether a user may have access to information as is presently claimed. *Noble et al.* suggests that access is a given to meta-data in a UNIX file system (*i.e.*, there is no determination as to whether to permit access). Further, *Noble et al.* only discloses a knowledge-base-like dictionary server that assists in what appears to be freely accessible access through parsing, translating, coordinating, and the like. As such, the Applicants respectfully contend *Noble et al.* fails to disclose each and every limitation of presently amended claim 1 and that it is, therefore, allowable over the Examiner’s rejection.

This conclusion appears to be supported by the Examiner’s own statements later in the *Office Action* wherein the Examiner states that “Noble discloses the elements of [previously presented] claim 1 as noted above **but does not disclose the access evaluator [that] determines whether the user may have access to the information resource.**” *Office Action*, 8 (emphasis added). Notwithstanding the apparent disagreement as to the Examiner’s rejection of claim 1 versus claim 5, the Applicant notes that this particular limitation is also **not found** in U.S. patent number 5,504,890 to *Sanford*. See *Office Action*, 8 (concerning the Examiner’s reliance under 35 U.S.C. § 103(a) as to *Sanford* in combination with *Noble*).

With respect to *Sanford*, the Examiner references column 2, lines 11-23. See *Office Action*, 9. This portion of *Sanford*, however, fails to disclose the presently claimed access evaluator. *Sanford* notes that “[e]ach contributor maintains a database with information therein pertaining to a plurality of monitored entities.” *Sanford*, col. 2, l. 14-16. “[E]ach particular contributor maintains autonomy over its database, and may **add, delete, or modify data entities typically without involvement or collaboration with the other inventors.**” *Sanford*, col. 2, l. 18-21 (emphasis added). This portion of *Sanford* only notes that the owner of the data may modify its data without the permissions of other inventors. This aspect of *Sanford* does not disclose the presently claimed access evaluator.

Further, *Sanford*—as cited by the Examiner—states that “each contributor is [also] **restricted from altering the data** which are uniquely attributable to other contributors.” *Sanford*, col. 2, l. 22-23 (emphasis added). This aspect of *Sanford*, however, only notes that one user may not *alter* (e.g., add, delete, or modify) the data attributed to another user. *Sanford* makes no mention of *access* or *evaluating access* to that data as is presently claimed. *Sanford*, in fact, suggests that users are allowed to freely access data attributed to other users through a collaborative process (col. 2, l. 18) but that alteration of that data is not permitted. This read-only access is indirect conflict with the presently claimed access evaluator that determines whether access may be had at any level—read-only or otherwise. As such, the Applicants respectfully content *Sanford* (either alone or in combination with *Noble*) fails to disclose each and every element of the present claimed invention and that the Examiner’s rejection is therefore overcome.

Dependent Claims

Each and every one of the dependent claims of the present application depends either directly from—or via another dependent claim that ultimately depends from—claim 1 of the present application. As a dependent claim incorporates each and every limitation of the claim from which it depends under 35 U.S.C. § 112, ¶ 4 and the Applicants content claim 1 is allowable for at least the reasons as set forth above, the Applicants contend each and every one of the dependent claims of the present application are allowable for at least the same reasons as claim 1.

CONCLUSION

The Applicants have amended the specification and abstract as requested by the Examiner and believe these objections to have been overcome.

The Applicants have evidenced proper 35 U.S.C. § 112 support for the various claim terminologies identified in, for example, claim 1 and believe the Examiner's related 35 U.S.C. § 112 rejection to have been overcome.

The Applicants have evidenced the distinctiveness of the independent claims of the present application versus *Noble et al.* and believe the Examiner's 35 U.S.C. § 102(b) rejection to have been overcome.

The Applicants have also evidenced the lack of certain claim elements of the independent claims of the present application and believe a rejection of claim 1 under 35 U.S.C. § 103(a) to, therefore, be unwarranted.

The Applicants note that while certain amendments have been to a number of dependent claims, these amendments are largely cosmetic. With regard to the amendment as to claim 4 and claim 1, no new claim elements have been introduced to the claims of the present application. That is, a previously examined element of claim 4 is now found in the body of claim 1. As such, the Applicants believe that while amendments to the claims have been made, those amendments in and of themselves do not warrant the issue of a final rejection should further action be warranted by the Examiner. As noted above, the Applicants believe claim 1 and its various dependencies to be allowable over the cited art of record.

The Applicants, as a final note, respectfully request allocation of Customer Number 22830; consideration of the concurrently submitted *Information Disclosure Statement*, and confirmation as to the entry of the previously presented priority claim.

As all of the Examiner's rejections are overcome, the Applicants respectfully request the passage of the present application to allowance. The Examiner is invited to contact the undersigned with any questions concerning this amendment or the overall state of this application.

Respectfully submitted,
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